ABSTRACT OF THE DISCLOSURE

A process for disinfecting and preserving a food commodity includes the steps of applying antimicrobial chemicals to the surface of the food commodity followed by subjecting the food commodity to a quick-chilling process. The chilling process creates a partial vacuum within the interior regions of the food commodity to create a driving force that assists the diffusion of the antimicrobial chemicals into the food commodity. In a preferred embodiment, the food commodity is chilled from about room temperature to about 10° C. or below in a period of time of less than about ten minutes. Once the chilling process is complete, the food commodity can be subjected to further processing steps, such as refrigeration or freezing, or other processing, such as cutting, sorting, and storage.